

REMARKS

A Petition for Extension of Time is being concurrently filed with this Amendment. Thus, this Amendment is being timely filed.

Applicants respectfully request the Examiner to reconsider the present application in view of the foregoing amendments to the claims and the following remarks.

Status of the Claims

Claims 2, 3, 4, 6 and 7 are currently pending in the present application. The Office Action is non-final. Claims 6 and 7 have been amended without prejudice or disclaimer. No new matter has been added by way of the amendments. Claim 7 was amended to further clarify the invention. Applicants note paragraph 2 of the outstanding Office Action and reconsideration of claim 7 is respectfully requested. Support for amended claim 6 can be found on page 12, lines 4-10, Table 4 and page 37, lines 1-16. Thus, no new matter has been added.

Based upon the above considerations, entry of the present Amendment is respectfully requested.

Issues Under 35 U.S.C. § 112, First Paragraph, Written Description

Claims 6 and 2-4 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly lacking written description support in the specification (paragraphs 5-7 of Office Action). The Examiner asserts that the claims contain subject matter not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor was in possession of the claimed invention at the time the application was filed.

Specifically, the Examiner asserts that that there is no indication in the specification that there is "not higher than 30%" ash content in the surface layer on each of the top and bottom side of the wrapper paper. The Examiner also asserts that there is no support in the specification for the concept that the ash content in the paper is higher on the top side than on the bottom side of the wrapper paper. Applicants respectfully traverse.

Although Applicants disagree, in order to further prosecution, Applicants have amended claim 6, without prejudice or disclaimer of the subject matter contained therein, to recite "the wrapper paper is not higher than 35% by mass." Support for amended claim 6 can be found on page 12, lines 4-10, Table 4 and page 37, lines 1-16. Applicants submit that the specification provides sufficient support for the criticality of 35% or less of ash content, as indicated by the Examiner on page 3, line 12 of the outstanding Office Action.

The Examiner also contends that there is no disclosure in the specification to support the concept of a higher ash content on a top surface of the wrapper paper and a lower ash content on a bottom surface of the wrapper paper. However, Applicants respectfully disagree with the Examiner. Applicants submit that sufficient disclosure exists for this concept as shown at least at pages 9-12 and page 35, lines 4-5, of the specification. The specification uses the term "loading material." Applicants submit that the "loading material" is calcium carbonate or ash.

As disclosed at page 9, lines 3-8, of the present specification, when a paper internally comprises a loading material (calcium carbonate) and is manufactured by a conventional Fourdrinier machine, the amount of the loading material on the wire side is made smaller than that on the felt side in accordance with the dehydration from the wire side in the paper layer-forming stage. As a result, the calcium carbonate content of the resulting paper is naturally

smaller on the wire side than on the felt side, and the calcium carbonate content is naturally higher than the total calcium carbonate content.

As further described in the present specification, at page 11, lines 2-12, the paper manufactured by the conventional Fourdrinier machine has the highest loading material (calcium carbonate) content on the felt surface, and the loading material content gradually decreases toward the wire surface.

In contrast, in the presently claimed invention, as described in the present specification, at page 10, lines 8-14, a double-sided dehydration type wire part is used to establish that the percentage of ash content in a surface layer on each of a top side (synonymous to the felt side) and a bottom side (synonymous to the wire side) of the wrapper paper is lower than a total ash content in the paper. The wrapper paper manufactured by the general Fourdrinier machine has the highest loading material content on the felt surface (surface side), and the loading material content gradually decreases going towards the wire surface (bottom side). On the other hand, in the wrapper paper manufactured by the twin wire type paper making machine, the difference in the content of the loading material between the inner region and the surface region of the paper layer is small and, thus the difference in the loading material content between the entire paper layer and each layer is considerably smaller. As described in the specification, the "difference in the loading material content between the entire paper layer and each layer is considerably small" indicates that the loading material is evenly distributed in the entire paper layer. Thus, the specification does adequately describe the concepts of higher and lower ash contents. In summary, the specification clearly indicates to one of ordinary skill in the art that the total ash

content is higher internally within the wrapper paper, and lower on the upper and lower surfaces of the wrapper paper.

Applicants submit that as described above, the claims contain subject matter adequately described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor was in possession of the claimed invention at the time the application was filed.

Applicants respectfully request reconsideration and withdrawal of the present rejection.

Issues Under 35 U.S.C. § 112, Second Paragraph, Indefiniteness

Claims 2-4, 6 and 7 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention (paragraphs 8-11 of Office Action).

The Examiner states that claim 6 requires that the top side and bottom side have lower ash content than the total ash content in percentage and that the top side and bottom side have an ash content that is not higher than 30% by mass. The Examiner also states that claim 7 is indefinite for reciting "is decreased." Applicants respectfully traverse.

Applicants have amended claim 6 to recite "the wrapper paper is not higher than 35% by mass." Applicants also have amended claim 7, to clarify the amount of calcium carbonate in the present invention.

Applicants respectfully submit that claim 6 as shown herein is clear to the skilled artisan, even when the claim requires both that the percentage of ash content in a surface layer on each of a top side and a bottom side of the wrapper paper is lower than a total ash content in percentage of the wrapper paper, and that the ash content in the surface layer on each of the top side and the

bottom side of the wrapper paper is not higher than 35% by mass. These two requirements are not inconsistent with each other. With regards to claim 7, Applicants submit that the present amendment conveys the Applicants' meaning more clearly.

Applicants submit that based on the amended claims and the present specification, Applicants have particularly pointed out and distinctly claimed the subject matter which the Applicants regard as their invention.

Applicants respectfully request reconsideration and withdrawal of the present rejection.

Issues Under 35 U.S.C. § 103(a), Obviousness

Claims 2-4, 6 and 7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamazaki, EP 0791688 (hereinafter, "Yamazaki") in view of Smook, Handbook for Pulp & Paper Technologies, section 20.7 (hereinafter, "Smook") (paragraphs 12-20 of Office Action).

Regarding the cited combination of references, the Examiner asserts that Yamazaki discloses a cigarette paper which has at least 30 g/m² calcium carbonate and at least 3% by mass of potassium or sodium citrate burn adjusting agents.

The Examiner does admit that Yamazaki does not disclose or suggest the use of a twin-wire former to make the papers which comprise the cigarette wrapper paper. Additionally, the Examiner asserts that the ash content of the paper of Yamazaki would be inherent because Yamazaki teaches a paper having essentially the same composition. The Examiner also asserts that such methods of making paper were commonly known to one of ordinary skill in the art at the time the present application was filed. To support this assertion, the Examiner cites to the disclosure of Smook, showing the use of twin-wire formers. Based on Smook, the Examiner

further asserts that that one of ordinary skill in the art could have used the twin-wire former method of making cigarette paper in combination with the disclosure of Yamazaki to achieve the presently claimed invention. Applicants respectfully traverse.

Applicable U.S. Case Law

Graham v. John Deere, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), has provided the controlling framework for an obviousness analysis. A proper analysis under § 103(a) requires consideration of the four *Graham* factors of: determining the scope and content of the prior art; ascertaining the differences between the prior art and the claims that are at issue; resolving the level of ordinary skill in the pertinent art; and evaluating any evidence of secondary considerations (e.g., commercial success; unexpected results). 383 U.S. at 17, 148 USPQ at 467.

M.P.E.P. § 2143 sets forth the guidelines in determining obviousness. But before the Examiner can utilize these guidelines, the Examiner has to take into account the factual inquiries set forth in *Graham v. John Deere*; *supra*. To reject a claim based on the above mentioned guidelines, the Examiner must resolve the *Graham* factual inquiries. MPEP §2143.

If the Examiner resolves the *Graham* factual inquiries, then the Examiner has to provide some rationale for determining obviousness, wherein M.P.E.P. § 2143 sets forth the rationales that were established in *KSR Int'l Co. v Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007).

Distinctions over Cited Combination of References

Applicants respectfully submit that the Examiner has not appropriately resolved the *Graham* factors, including the factors of determining the scope and content of the prior art and

ascertaining the differences between the prior art and the claims that are at issue. Based on the following, Applicants maintain that the above mentioned *Graham* factors actually reside in Applicants' favor. Additionally, Applicants submit that since the Examiner did not properly resolve the *Graham* factors, the rationale the Examiner provides for combining the cited references is improper.

Applicants respectfully submit that the presently claimed invention is distinct from and unobvious over Yamazaki combined with Smook. Applicants have amended claim 6 to recite "the wrapper paper is not higher than 35% by mass." Applicants also have amended claim 7 to further define the invention. The Examiner asserts that the claimed ash content characteristics are either inherent or obvious based on Yamazaki disclosing a paper having essentially the same composition. However, regarding the mentioned claims as amended, Applicants submit that Yamazaki is silent as to where, within the wrapper paper, the ash content is to be distributed (as directed in the presently amended claims) and that the properties of the present invention are not inherent in the wrapper of Yamazaki.

Applicants again note that "ash content" corresponds to "calcium carbonate content" within the wrapper, which is supported by the present specification and as is known to one of ordinary skill in the art.

As indicated in amended claim 6, the claim requires the limitations "at least 30 g/m² of calcium carbonate, and at least 3% by mass of a burn adjusting agent" as well as "wherein the percentage of ash content in a surface layer on each of a top side and a bottom side of the wrapper paper is lower than a total ash content in percentage of the wrapper paper, and wherein the ash content in the surface layer on each of the top side and the bottom side of the wrapper

paper is not higher than 35% by mass.” The last two limitations are not merely resultant properties of the first two limitations. The last two limitations instruct where exactly in the paper, and by what proportions, the ash content of the wrapper paper is contained. The ash content of wrapper papers may be in any number of configurations or quantities anywhere within the wrapper paper. Therefore, Applicants respectfully traverse the Examiner’s assertions regarding inherency.

As indicated above, when a paper internally comprises a loading material (calcium carbonate) and is manufactured by a conventional Fourdrinier machine, the amount of the loading material on the wire side is made to be smaller than that on the felt side in accordance with the dehydration from the wire side in the paper layer-forming stage. As a result, the calcium carbonate content of the resulting paper is naturally smaller on the wire side than on the felt side, and the calcium carbonate content is naturally higher than the total calcium carbonate content in the paper.

In contrast, in the presently claimed invention, as described in the present specification, at page 10, lines 8-14, a double-sided dehydration type wire part is used to establish that the percentage of ash content in a surface layer on each of a top side (synonymous to the felt side) and a bottom side (synonymous to the wire side) of the wrapper paper is lower than a total ash content in the paper. The wrapper paper manufactured by the twin wire type paper making machine, the difference in the content of the loading material between the top side and the bottom side of the paper layer is small and, thus, the difference in the loading material content between the entire paper layer and each layer is considerably small. As indicated in the specification, the “difference in the loading material content between the entire paper layer and

each layer is considerably small” indicates that the loading material is evenly distributed in the entire paper layer. The distribution of the loading material cannot be achieved in the paper of Yamazaki. Inherently, the Yamazaki paper will have the highest loading material (calcium carbonate) content on the felt surface, and the loading material content gradually decreases toward the wire surface of its wrapper. This is completely different than the present invention, wherein the cited reference discloses a different product. As the Examiner stated, Yamazaki does not disclose or suggest using a double-sided dehydration type wire part to make its wrapping paper. Thus, the presently claimed invention is not inherent in or obvious from Yamazaki since it does not disclose or suggest all of the limitations of the presently pending claims.

The Examiner comments at page 2 of the Office Action that Applicants have based arguments on limitations that are not present in the claims, wherein the Examiner is referring to Applicants’ arguments concerning the double-sided dehydration type wire part or twin wire type wire part. With regards to the above, Applicants note that as stated *In re Payne* at 203 USPQ 245, 255 (CCPA 1979):

References relied upon to support a rejection under 35 USC 103 must provide an enabling disclosure, i.e., they must place the claimed invention in the possession of the public. *In re Brown*, 51 CCPA 1254, 1259, 329 F.2d 1006, 1011, 141 USPQ 245, 249 (1964). An invention is not “possessed” absent some known or obvious way to make it. *In re Hoeksema*, 55 CCPA 1493, 1500, 399 F.2d 209, 274, 158 USPQ 596, 601 (1968). Hence, the presumption of obviousness based on close structural similarity is overcome where the prior art does not disclose or render obvious a method for making the claimed compound. *Id.* at 1500, 399 F.2d at 274, 158 USPQ at 601. It can be assumed that the method disclosed for making the reference compound would provide those skilled in the art with a method for making the structurally similar claimed compounds. *In re Grose*, 592 F.2d 1161, 1168, 201 USPQ 57, 63 (CCPA 1979). However, the PTO can properly rely on additional references. *Cf. In re Samour*, 57 F.2d 559, 562-63, 197 USPQ 1, 4 (CCPA 1978). Moreover, the method suggested by the prior art need not be that

disclosed by the applicant. *In re Maloney*, 56 CCPA 1218, 1221-23, 411 F.2d 1321, 1323-25, 162 USPQ 98, 100-02 (1969).

Here, the Examiner states that the Yamazaki reference discloses or teaches the present invention. However, one of ordinary skill in the art would not be able to achieve or make the instant invention as discussed in detail above. Yamazaki informs the skilled artisan of a different machine that makes a different product versus that of the present invention.

Further, Applicants respectfully submit that the Examiner misunderstands the point of Applicants' arguments. That is, Applicants were arguing that based on the methods used in Yamazaki, it is physically impossible to obtain the wrapper recited in the present claims, because a different machine was used to manufacture the wrapper paper of the present claims. With regards to Smook, the Smook reference relates to tissue paper and does not disclose or suggest making a cigarette paper with the loading material by a twin wire former.

Still, the Examiner states, at the bottom of page 6 of the Office Action, that the present application contains "product by process" claims. However, the present application clearly does not contain any such process steps. All of claims 2-4, 6 and 7 are composition claims. Further, as presently amended, claim 7 does not recite any active steps. Amended claim 7 recites the following:

*A wrapper paper for a smoking article, which decreases an amount of visible sidestream smoke of tobacco, the wrapper paper containing:
at least 30 g/m² of calcium carbonate, and
at least 3% by mass of a burn adjusting agent,
wherein the amount of calcium carbonate in a surface layer on each of a top side and a bottom side of the wrapper paper is less than the amount of calcium carbonate contained within the wrapper paper.*

It is clearly understood from the claim language that the total amount of calcium carbonate in the wrapper paper is maintained as indicated in the first limitation "at least 30 g/m² of calcium carbonate," while the relative amount of calcium carbonate on the surface layers is less than the amount in the rest of the paper. In other words, the amount (concentration) of calcium carbonate inside the paper is greater than the amount (concentration) in the top and bottom surface layers. This is clear from the simple language of claim 7, the meaning of which has not been questioned. Thus, the Examiner is referring to limitations that are literally not present anywhere in the claims.

With regards to the Examiner's assertion on page 8 that "In the event any differences can be shown for the product of the product by- process claim(s) 7, as opposed to the product taught by the reference Yamazaki, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product ...," Applicants submit that claim 7 cannot be interpreted as a product-by-process claim. Each limitation within claim 7 has to be considered in light of the prior art. As indicated above for claim 6, one of ordinary skill in the art based on the disclosure in Yamazaki cannot produce the paper of the present invention.

In light of the above presently amended claims and remarks, because there is no disclosure, teaching, suggestion, reason or rationale provided in the Yamazaki reference that would allow one of ordinary skill in the art to arrive at the instant invention as claimed, it follows that the same reference is incapable of rendering the instant invention obvious under the provisions of 35 USC § 103(a). Based upon the above, and applying the *Graham factors* analysis test, it is submitted that a *prima facie* case of obviousness has not been established.

Since the present invention is not obvious in light of Yamazaki, the combinations of Yamazaki and Smook also fail. The secondary reference, Smook, does not cure the deficiencies of Yamazaki. Therefore, the combinations of Yamazaki and Smook do not arrive at the present invention. Based upon the above, and applying the *Graham factors* analysis test, it is submitted that a *prima facie* case of obviousness has not been established for any of the above mentioned claims.

Applicants respectfully request reconsideration and subsequent withdrawal of the above rejection.

CONCLUSION

A full and complete response has been made to all issues as cited in the Office Action. Applicants have taken substantial steps in efforts to advance prosecution of the present application. Thus, Applicants respectfully request that a timely Notice of Allowance issue for the present case.

In view of the above remarks, it is believed that claims are allowable.

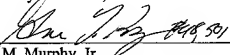
Should there be any outstanding matters within the present application that need to be resolved, the Examiner is respectfully requested to contact Paul D. Pyla, Reg. No. 59,228, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated:

DEC 1 2 2008

Respectfully submitted,

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